

Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

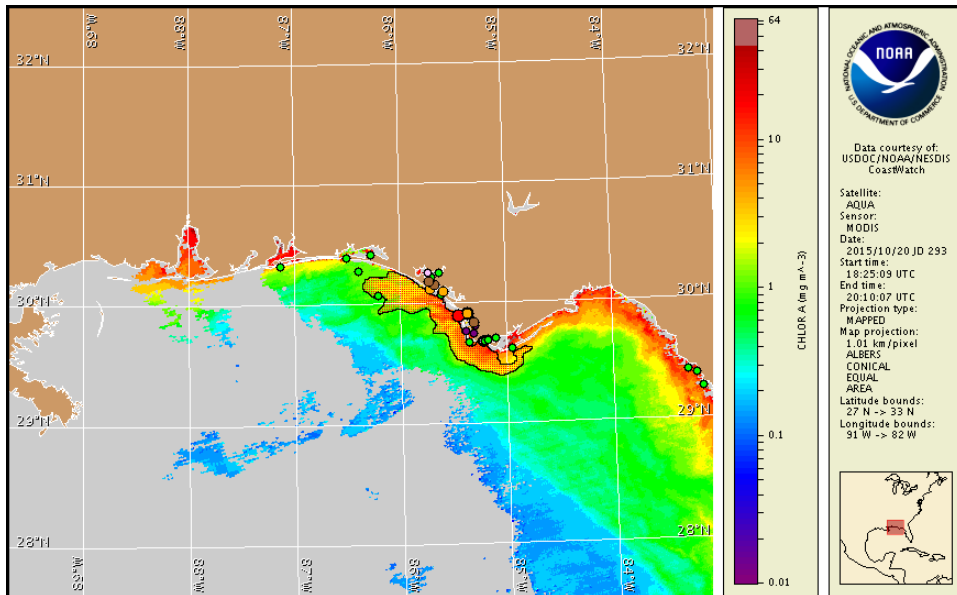
Thursday, 22 October 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 19, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 12 to 21: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Not present to high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest Florida from Escambia to Taylor counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for along-shore northwest Florida Thursday, October 22 to Monday, October 26 is listed below:

County Region: Forecast (Duration)

Bay County: Very Low (Th-Sa), Low (Su-M)

Bay County, bay regions: Moderate (Th-Su), High (M)

Gulf County: Low (Th-M)

Gulf County, west bay regions-St. Joseph Bay area: Low (Th-M)

Gulf County, east bay regions-Indian Lagoon area: Low (Th-M)

All Other NWFL County Regions: None expected (Th-M)

SWFL County Regions: Visit <http://tidesandcurrents.noaa.gov/hab/#swfl>

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Reports of dead fish and respiratory irritation have been received alongshore Gulf and Bay counties.

Analysis

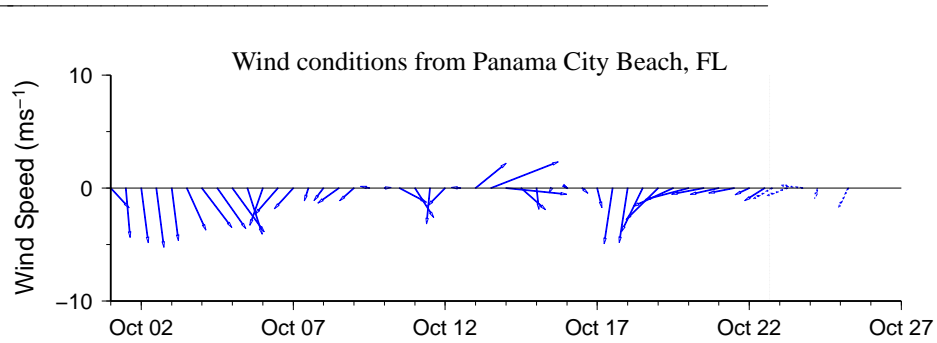
Samples collected over the past week alongshore northwest Florida from Escambia to Taylor counties continue to identify background to 'high' *Karenia brevis* concentrations alongshore Bay to Gulf counties, with the highest concentration identified in Gulf County near Mexico beach, including recent samples confirming 'high' *K. brevis* concentrations 4.7 miles offshore Mexico beach (FWRI; 10/15-10/19). Sampling in the bay regions of Bay and Gulf counties confirmed an increase from 'low a' to 'medium' *K. brevis* concentrations in Saint Andrews Bay near Saint Andrews Park and a decrease from 'low b' to 'low a' concentrations within St. Joseph's Bay (FWRI; 10/19). Samples collected alongshore Escambia, Okaloosa, and Walton counties indicated that *K. brevis* is not present (FWRI; 10/15-10/19). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>. Fish kills have been reported near the Port St. Joe area of Gulf County and within Saint Andrews Bay in Bay County (FWRI; 10/19, 10/21).

In recent ensemble imagery (MODIS Aqua, 10/20), a feature elevated to very high chlorophyll (2 to >20 µg/L) with the optical characteristics of *K. brevis* is visible along- and offshore northwest Florida from Walton to Franklin counties, extending up to 20 miles offshore Bay County.

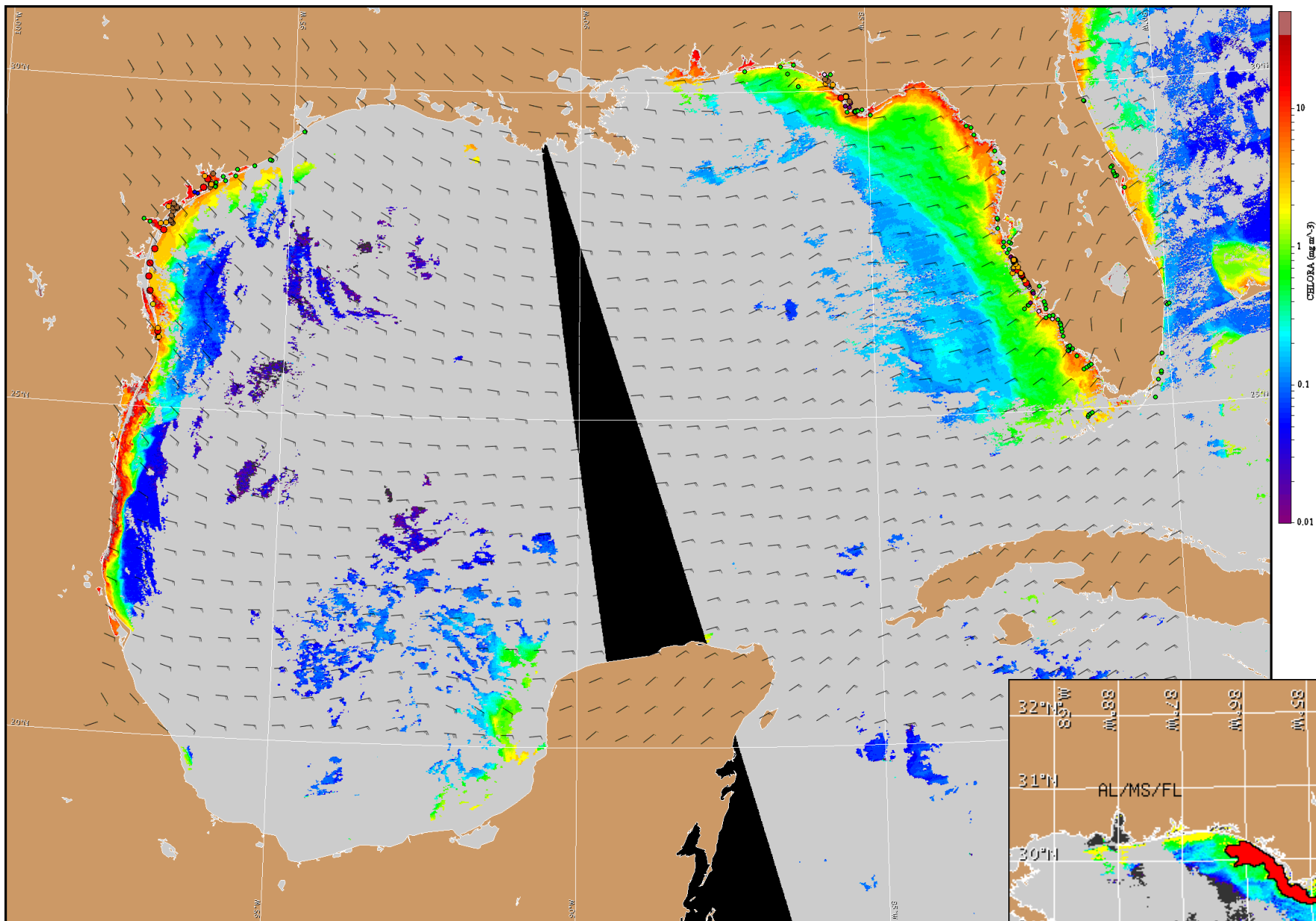
Winds forecasted alongshore northwest Florida today through Monday may promote westward transport of *K. brevis* concentrations alongshore northwest Florida. Forecasted winds through Monday will minimize the potential for intensification of *K. brevis* concentrations at the coast. ~ Keeney, Derner

Wind Analysis

Escambia to Taylor counties: East winds (10-15kn, 5-8m/s) today through Monday.

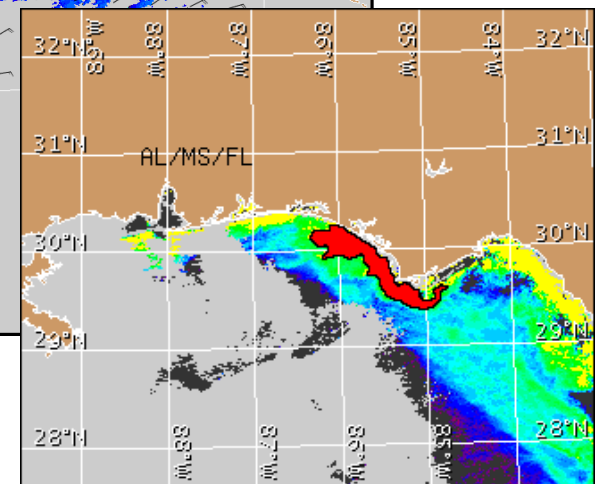


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



Satellite chlorophyll image and forecast winds for October 23, 2015 06Z with points representing cell concentration sampling data from October 12 to 21: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).